

## Public Agenda Item #9a

Review, Discussion and Consideration of the Real Estate Program:  
a. Market Update and Program Overview

May 17, 2016

Robert Sessa, CFA, Director of Real Estate

Tony Cardona, Real Estate Analyst

Amy Cureton, Real Estate Portfolio Manager

Dan Krivinskas, Director of Real Estate, Principal, RVK, Inc.

# Real Estate Market Update & Program Overview

## *Agenda*



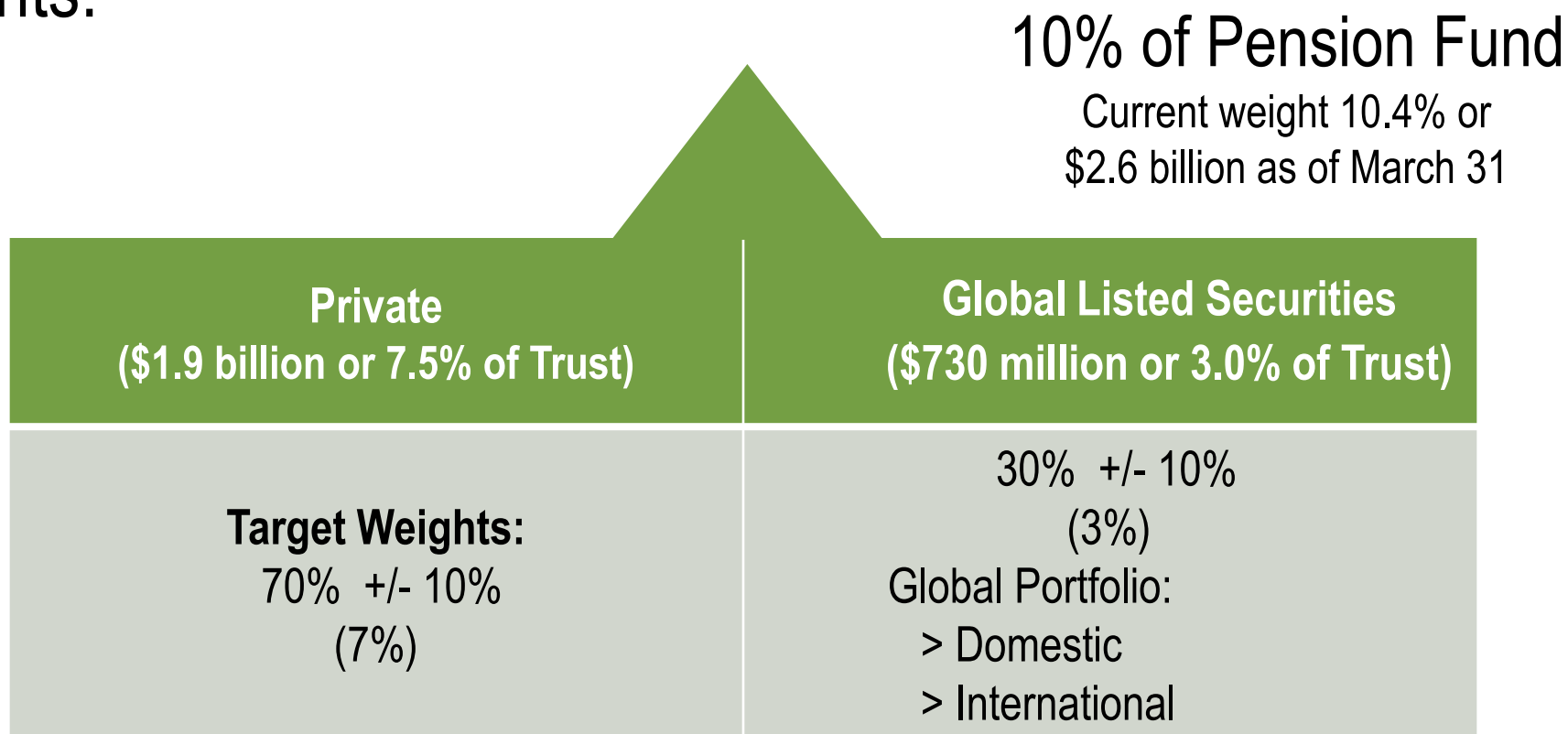
- Real Estate Overview
- Staffing
- Listed Securities as of March 31, 2016
- Private Real Estate
- Accomplishments
- Initiatives

# Real Estate Market Update & Program Overview

## Overview



### Target Weights:



# Real Estate Market Update & Program Overview

## Staffing



**Bob Sessa, CFA**  
**Director of Real Estate**

- 22 years work experience, 15 real estate
- BS from Fordham University and MBA from UT Austin

**Annie Xiao, CFA**  
**Portfolio Manager**

- Covers Int'l Listed Securities
- 15 years work experience, 10 real estate
- BS from Zhengzhou University and MBA from Duke

**Ken McDowell, CPA**  
**Portfolio Manager**

- Private Real Estate Focused
- 25 years work experience, 25 real estate
- BA and BS from Ohio State University

**Amy Cureton**  
**Portfolio Manager**

- Private Real Estate, 13 years work experience, 8 real estate
- BA and MBA from UT Austin

**Adam Cibik**  
**Portfolio Manager**

- Private Real Estate Focused
- 15 years work experience, 15 real estate
- BS and MBA from the University of Wisconsin

**Tony Cardona**  
**Analyst**

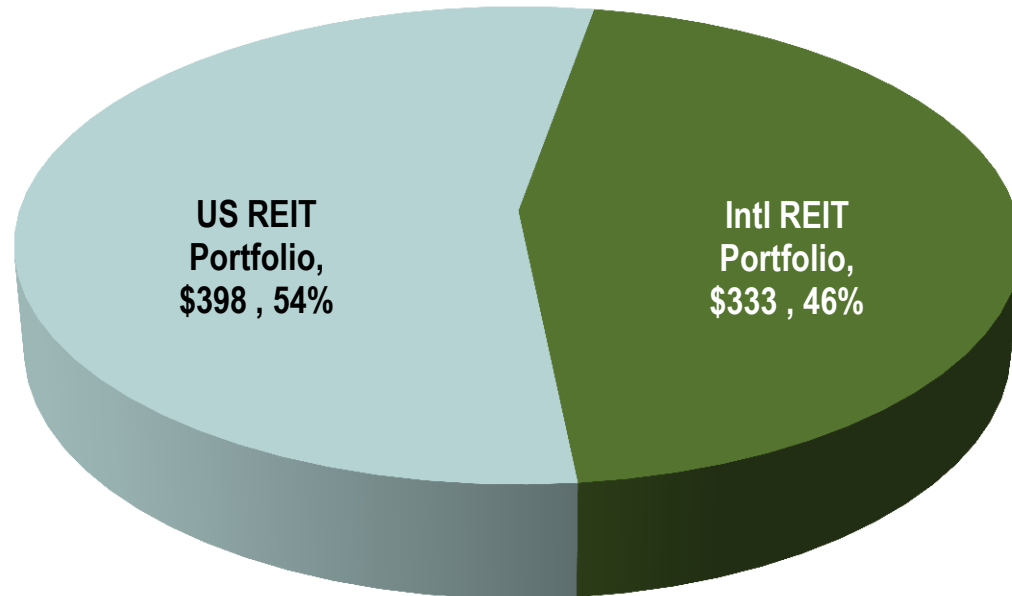
- Public Real Estate Focused
- 7 years work experience, 2 real estate
- BS from Cornell University

# Real Estate Market Update & Program Overview

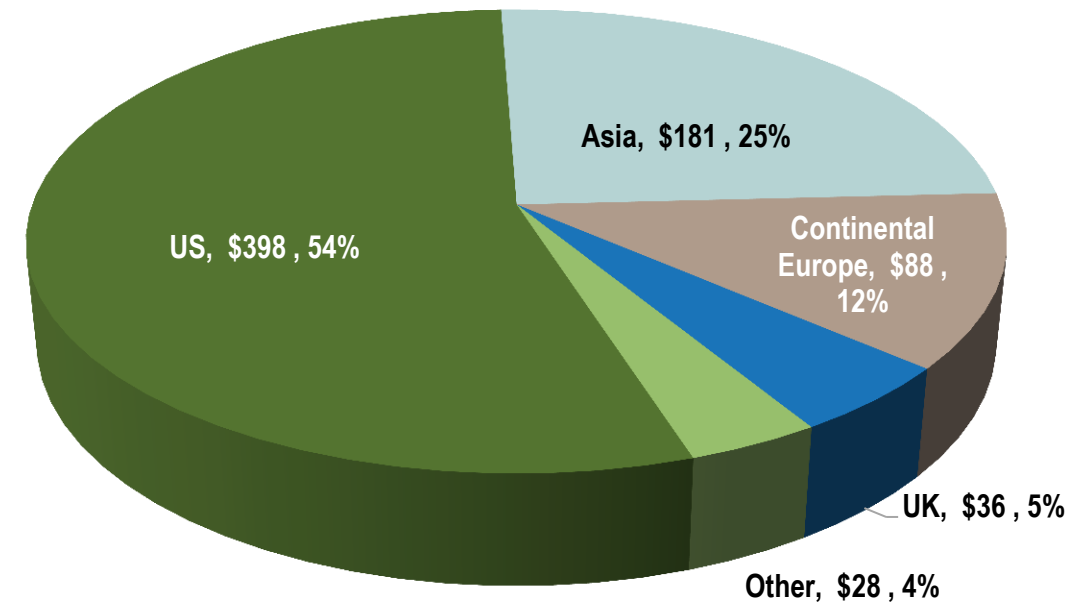
## Listed Securities as of March 31, 2016



**Total Portfolio: \$731 million**



**Total REIT Portfolio by Geography**

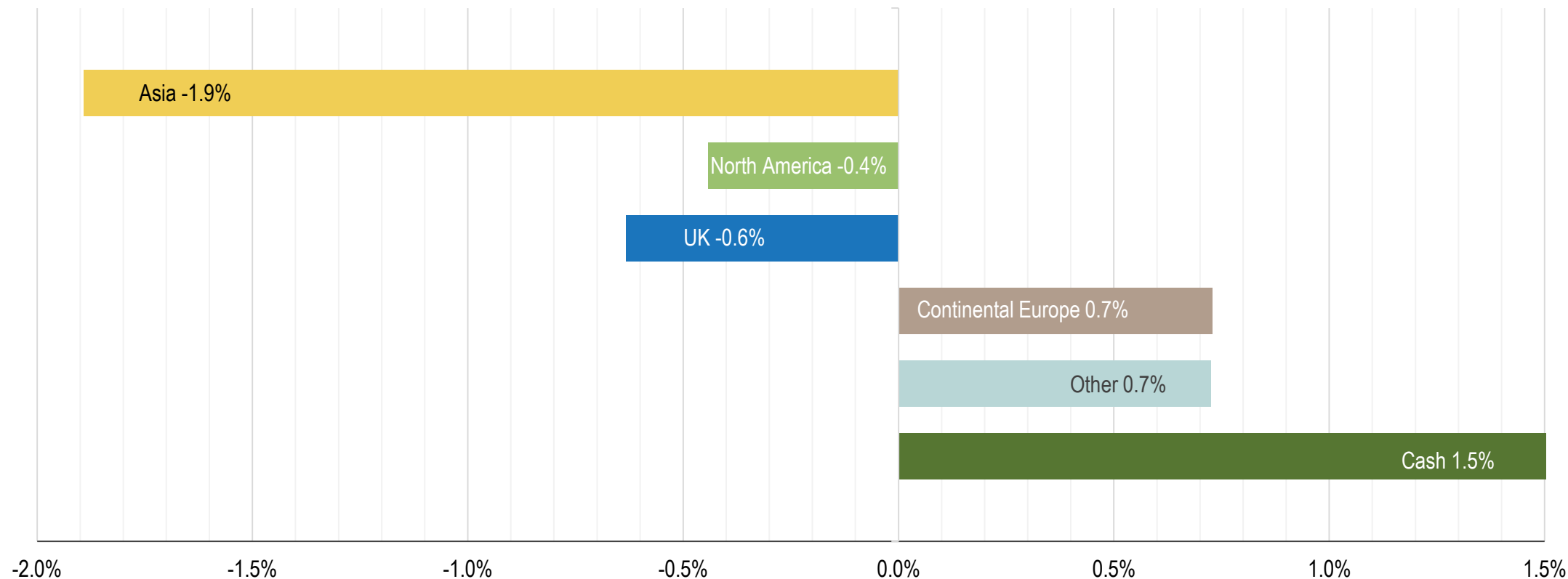


# Real Estate Market Update & Program Overview

## Listed Securities as of March 31, 2016



Portfolio Over/Underweight

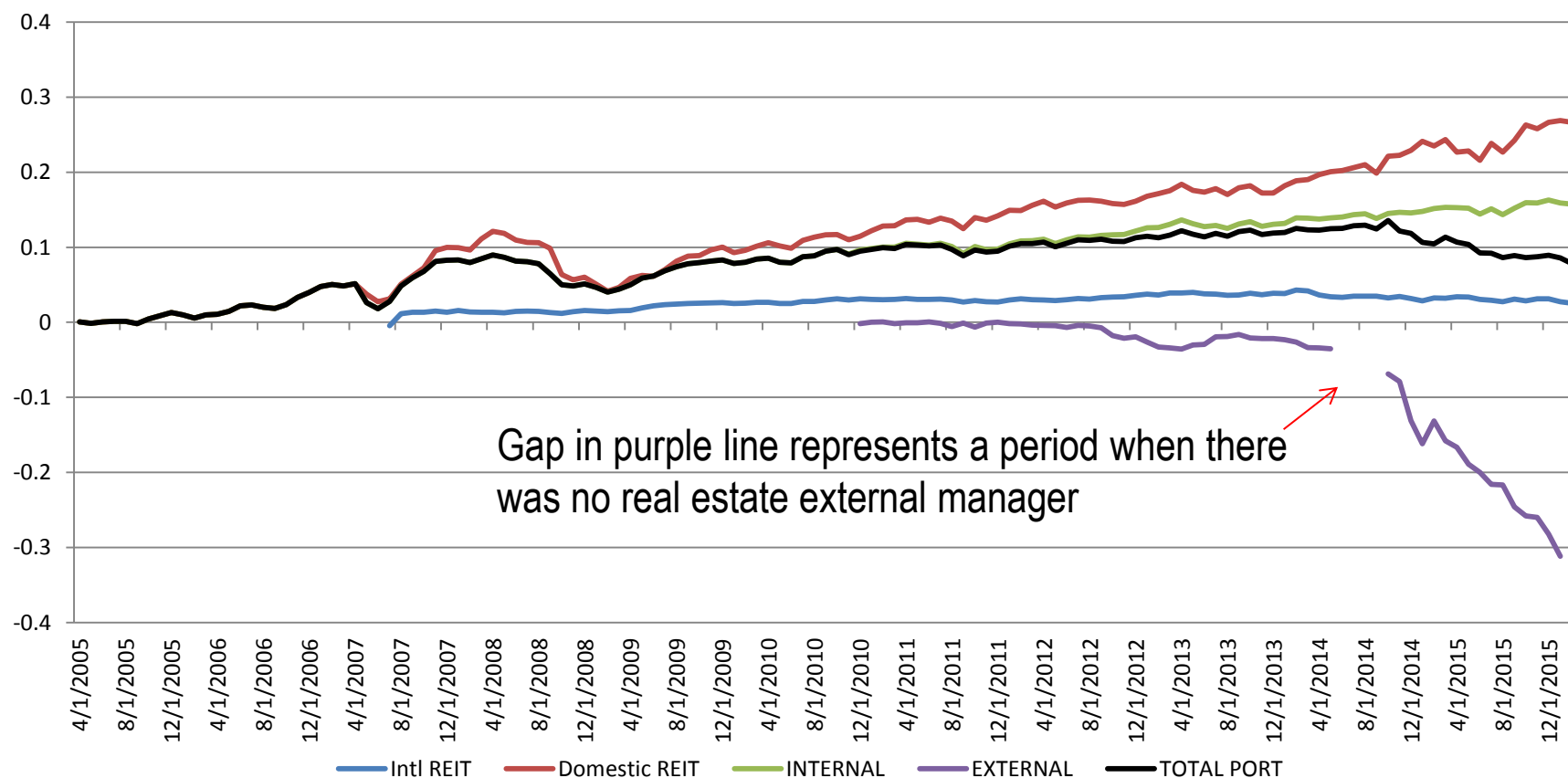


# Real Estate Market Update & Program Overview

## Excess Total Return as of March 31, 2016

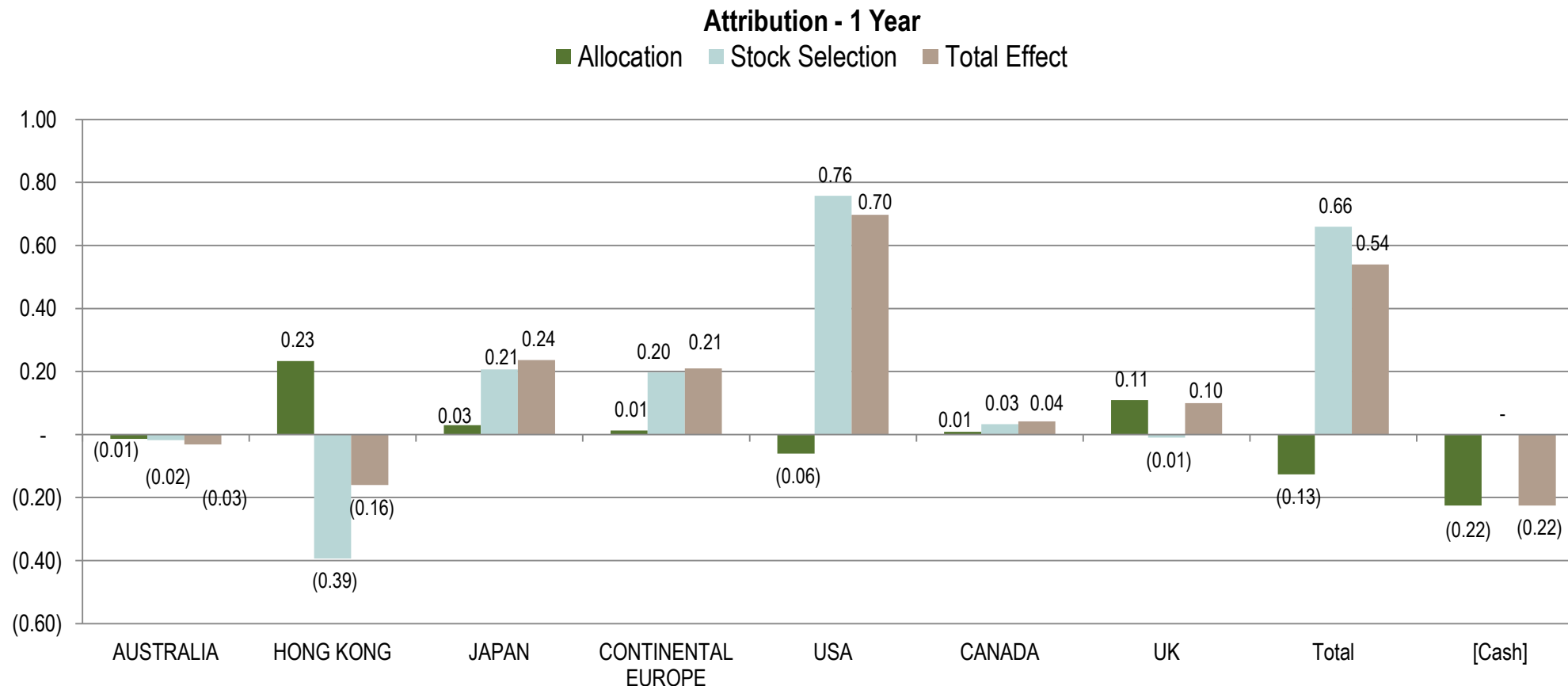


Since Inception Cumulative Excess Total Return



# Real Estate Market Update & Program Overview

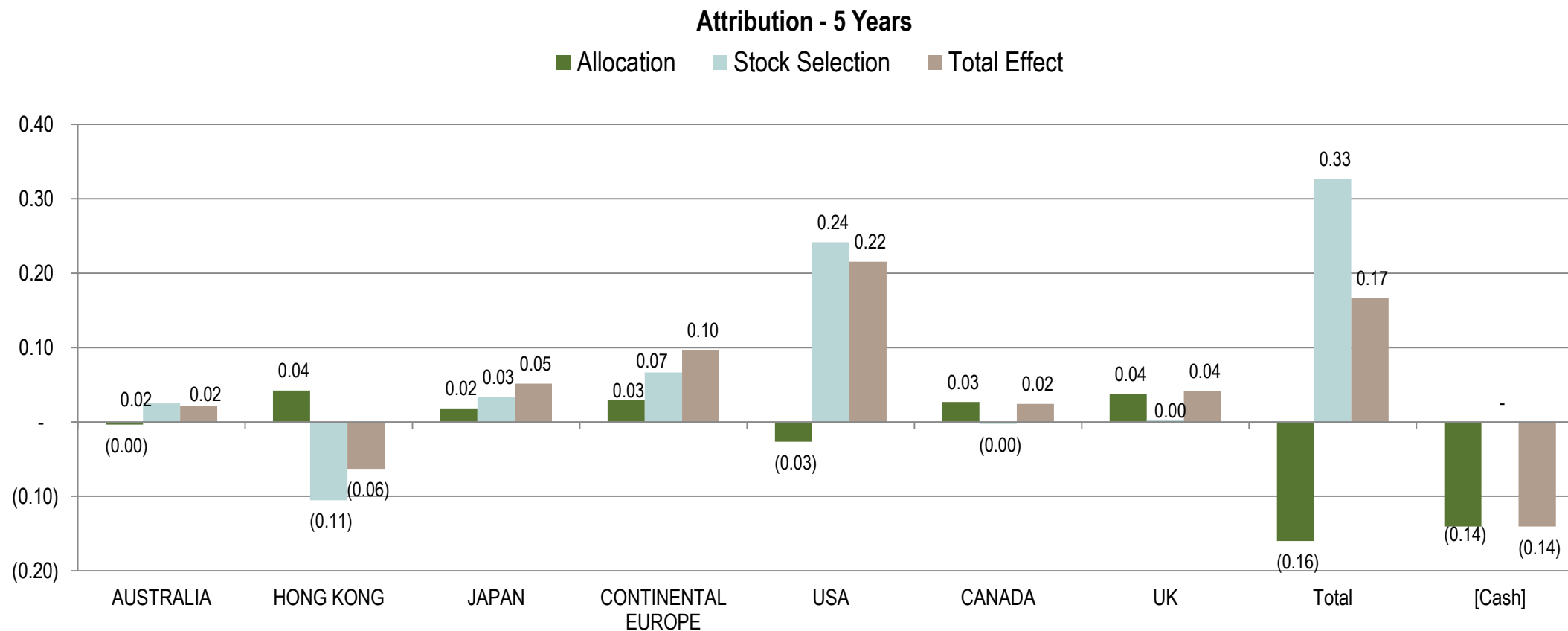
## Attribution as of March 31, 2016





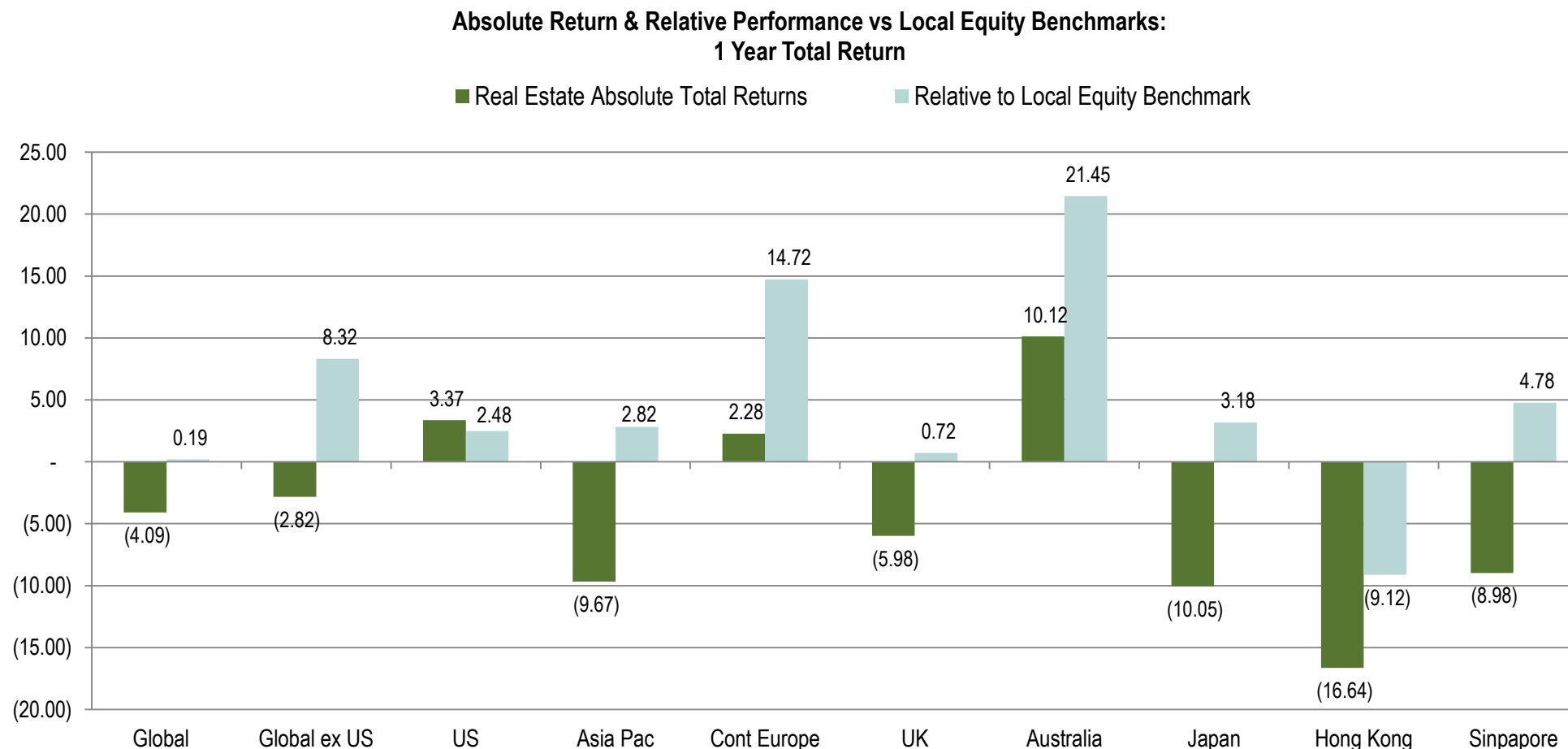
# Real Estate Market Update & Program Overview

## Attribution as of March 31, 2016



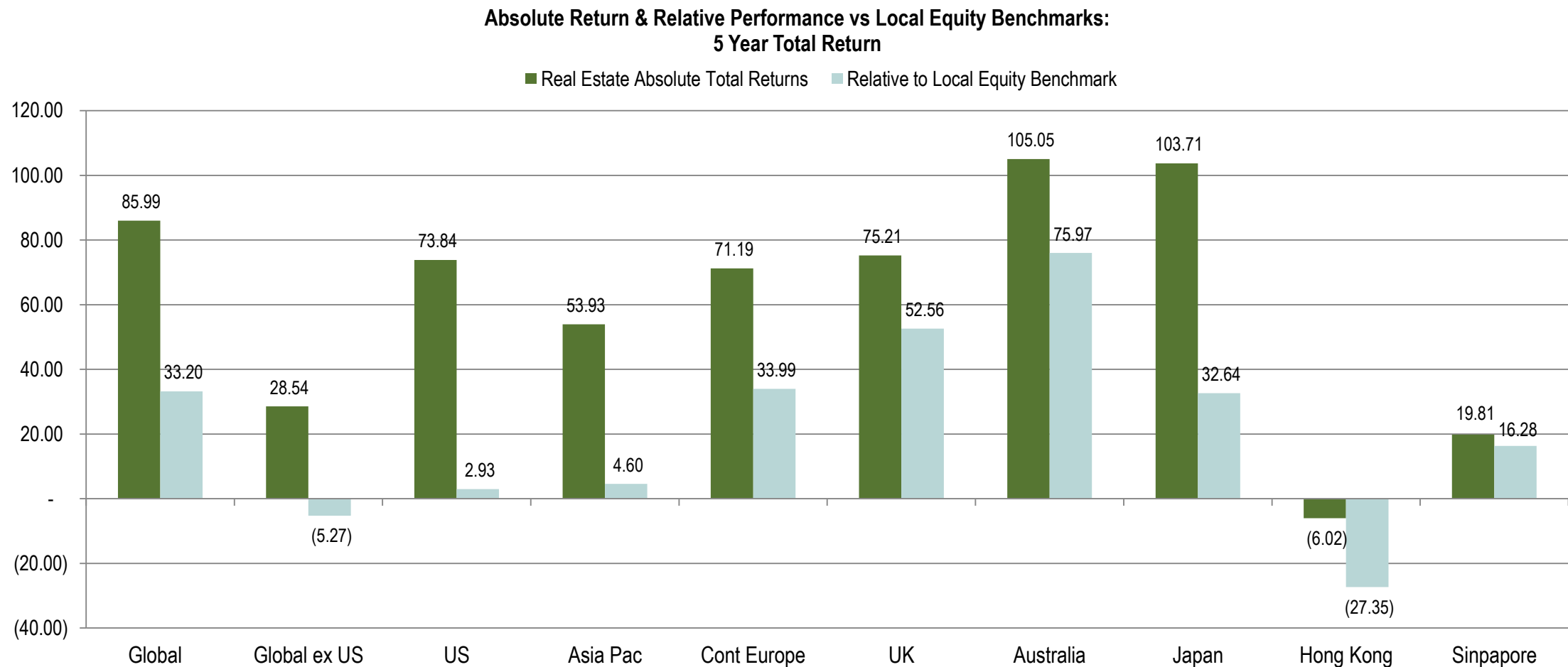
# Real Estate Market Update & Program Overview

## Global Real Estate Market Total Returns vs Broader Equity Market



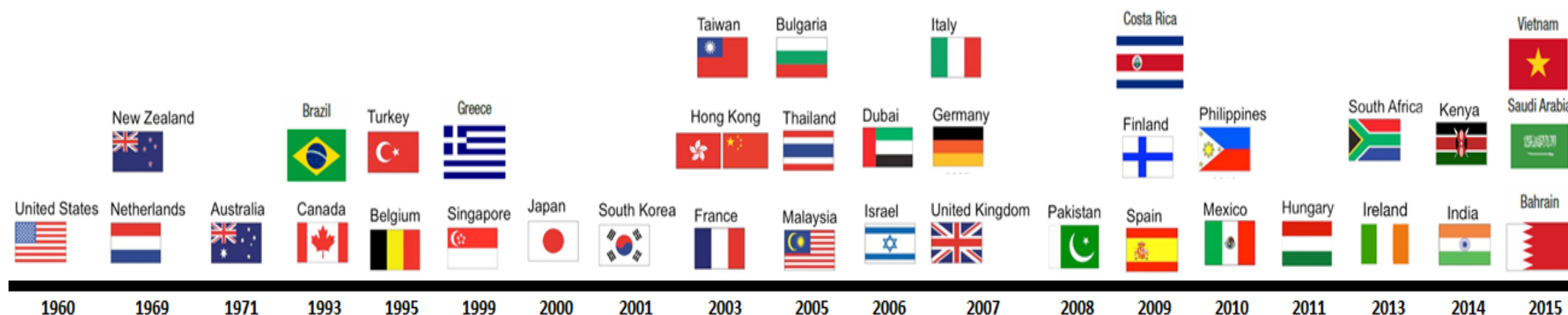
# Real Estate Market Update & Program Overview

## Global Real Estate Market Total Returns vs Broader Equity Market



# Real Estate Market Update & Program Overview

## *Global Adoption of REIT Structure*



# Real Estate Market Update & Program Overview

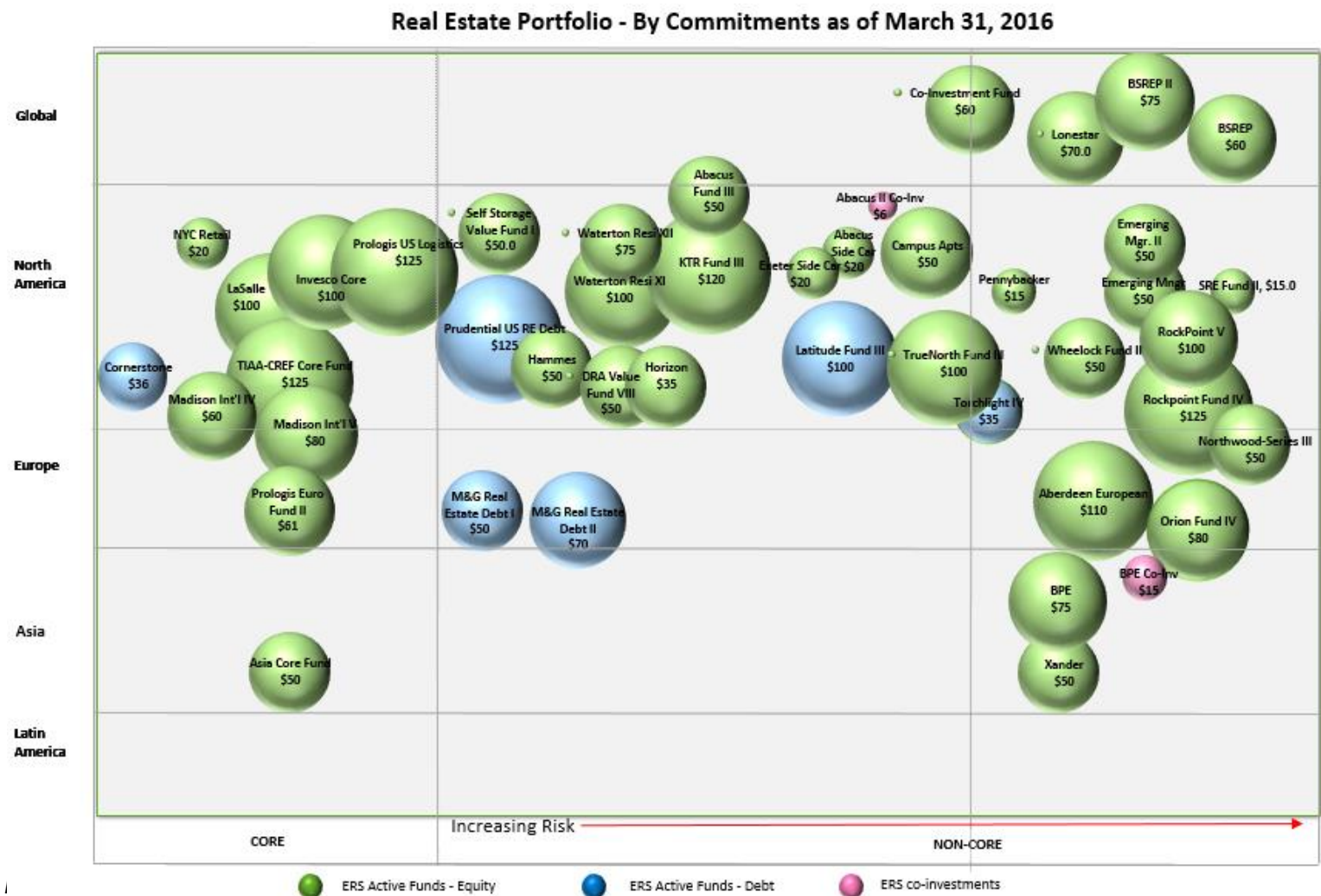
## *Private Real Estate*



- **PRIVATE REAL ESTATE PORTFOLIO NAV:**  
\$1.9 billion
- **INVESTMENT TYPE:** Equity 85%; Debt 15%
- **OVERALL LTV:** 45%
- **COMMITMENTS:**
  - Total Portfolio (since inception) \$2.9 billion with 45 Investments and 32 managers
  - FY 2016 Committed \$191 million to 8 Deals
- **CAPITAL CALLED:**
  - Since Inception  $\approx$  \$2.1 billion
  - FY 2016 \$325 million
- **DISTRIBUTIONS:**
  - Since Inception  $\approx$  \$895 million
  - FY 2016  $\approx$  \$215 Million

# Real Estate Market Update & Program Overview

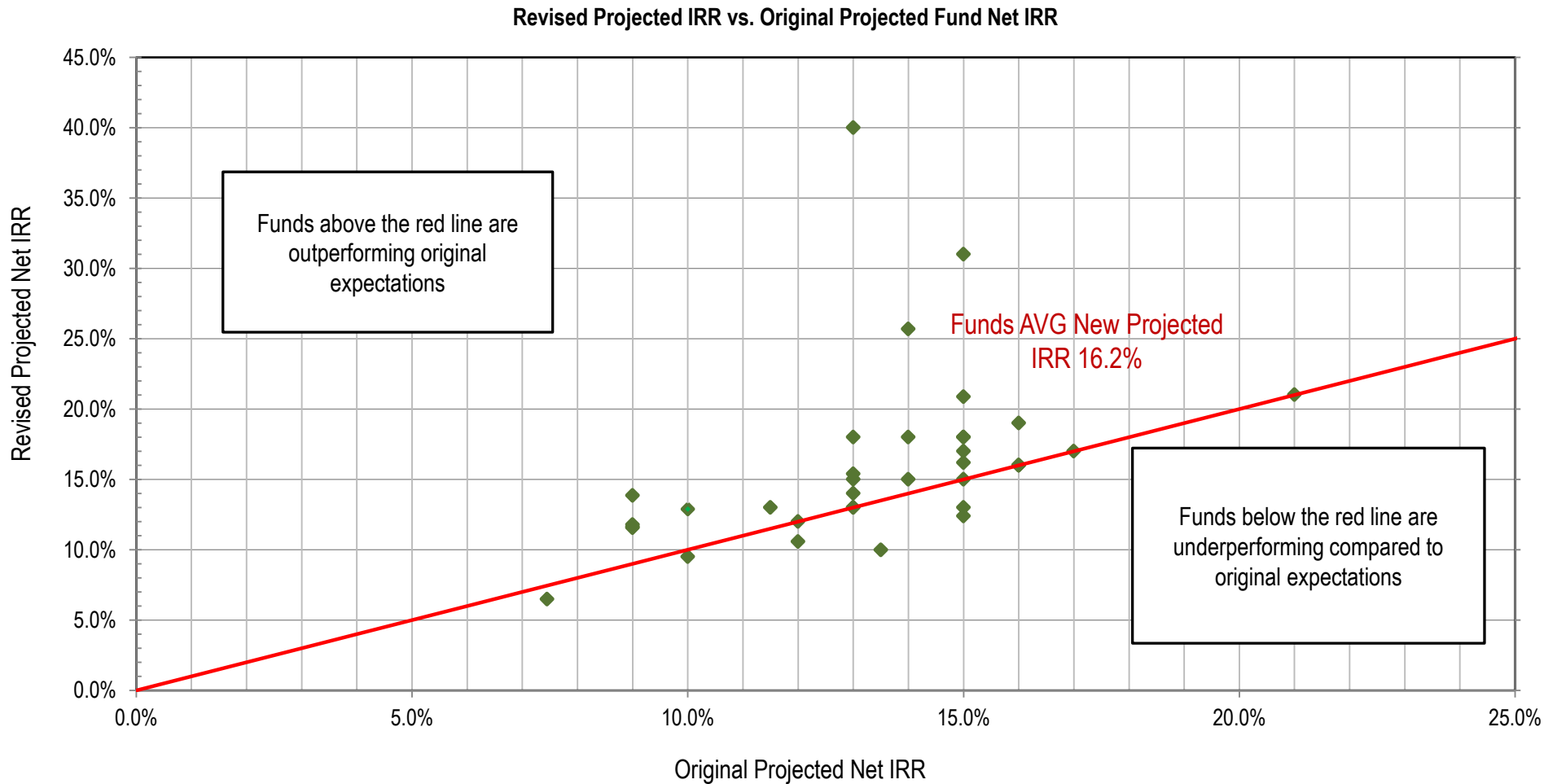
## Private Real Estate Portfolio Stratification



Note: Size of bubbles reflects the size of the ERS commitment

# Real Estate Market Update & Program Overview

## Private Real Estate Portfolio Original and Current Return Projections

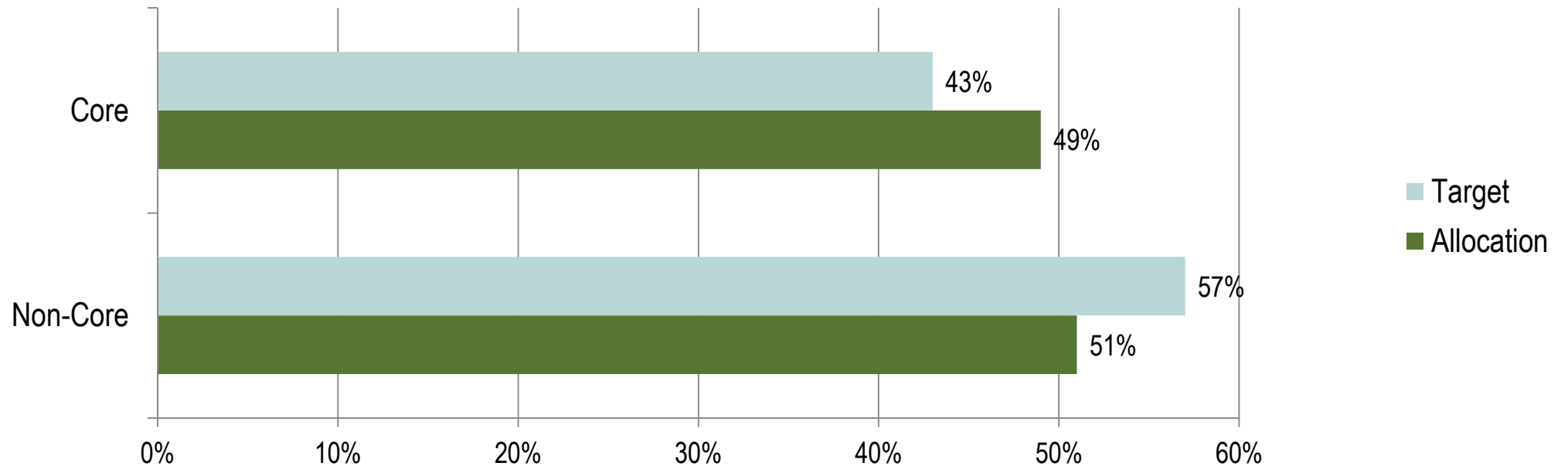


# Real Estate Market Update & Program Overview

## *Asset Allocation vs. Target as of March 31, 2016*



**Current Allocation vs. Target Allocation**



*Note: Current allocation based on current NAV + unfunded commitments*

*Agenda item 9a - Meeting book dated May 17, 2016*

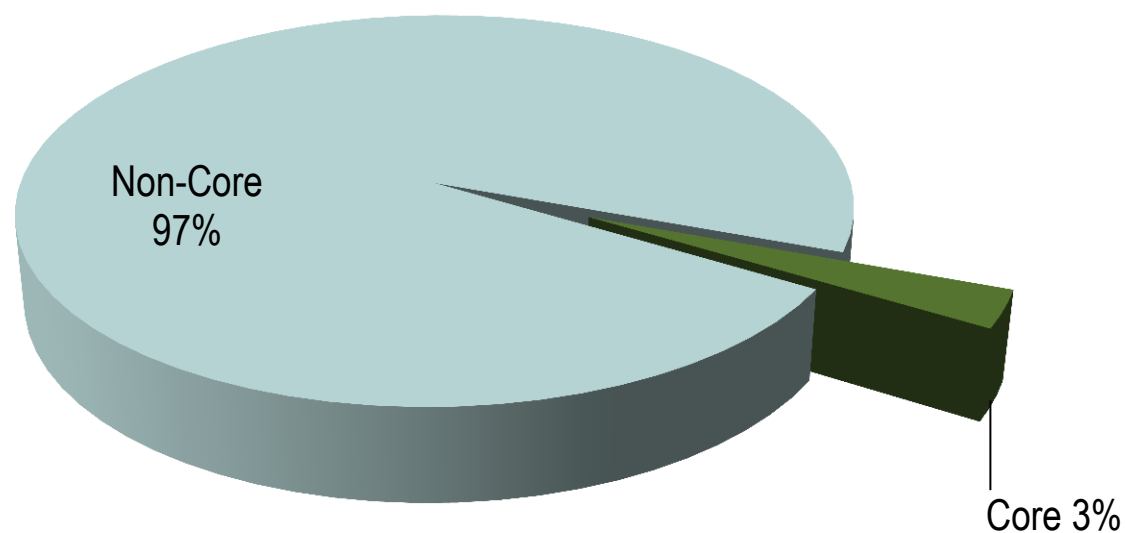


# Real Estate Market Update & Program Overview

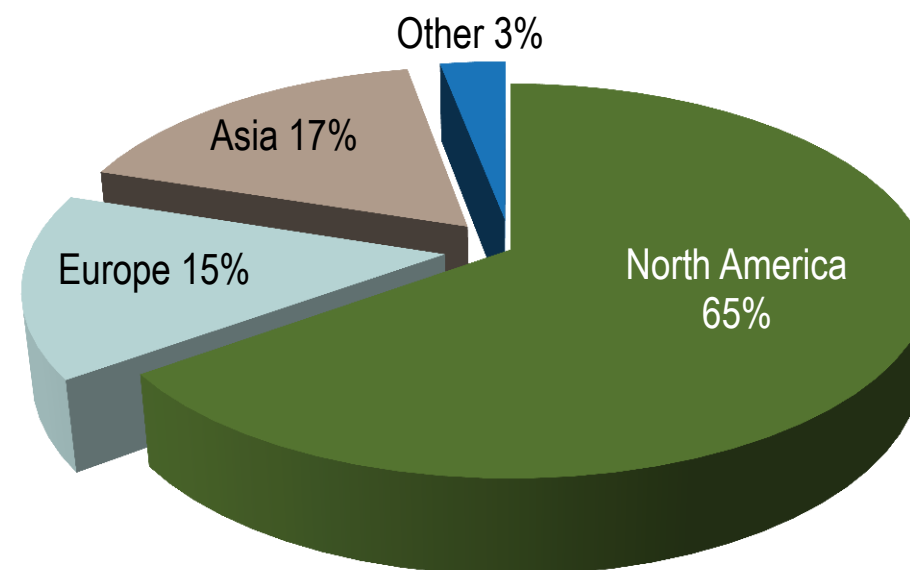
## *Private Real Estate Portfolio as of March 31, 2016*



Unfunded Commitments by Strategy  
≈ \$770 million



Unfunded Commitments by Geography

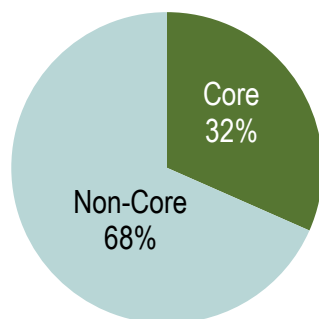


# Real Estate Market Update & Program Overview

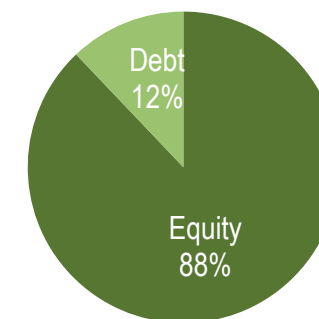
## *Total Economic Exposure as of March 31, 2016*



**Total Portfolio by Risk/Return Profile**

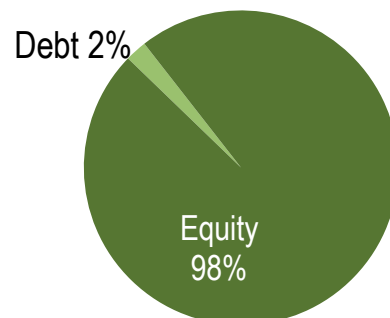


**Total Portfolio by Capital Structure Position**

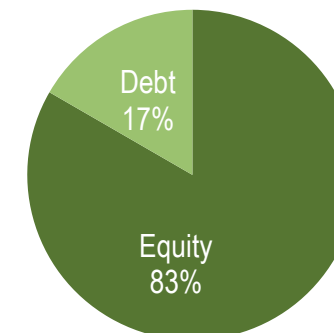


### **Portfolio by Risk/Return Profile and Capital Structure Position**

**Core Portfolio**



**Non-Core Portfolio**

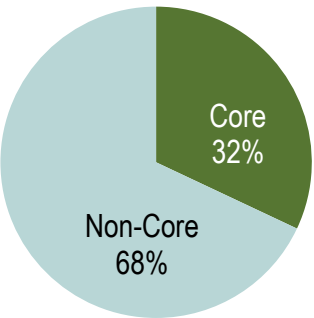


# Real Estate Market Update & Program Overview

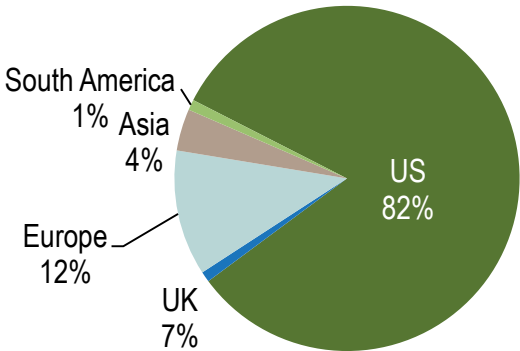
## *Economic Exposure as of March 31, 2016*



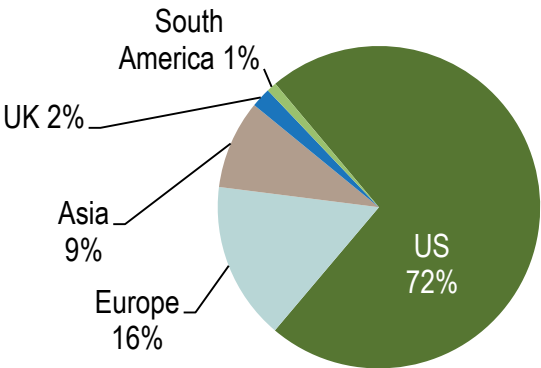
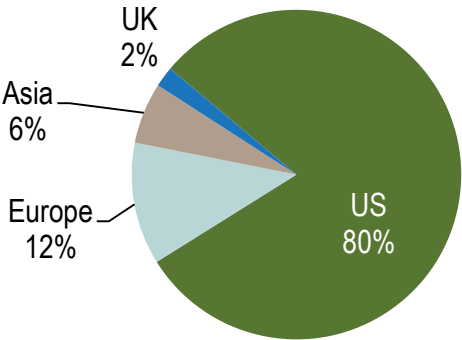
Total Portfolio by Risk/Return Profile



Total Portfolio by Region



Portfolio by Risk/Return Profile and Geographic Region

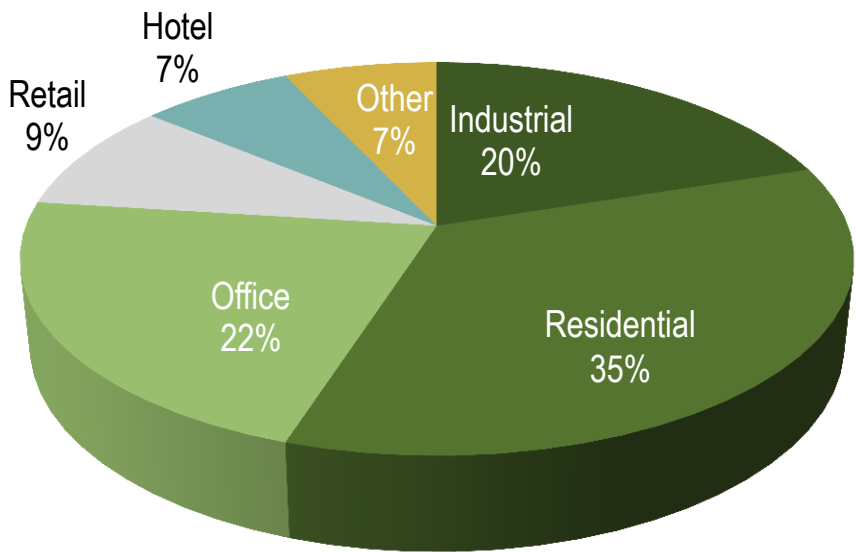


# Real Estate Market Update & Program Overview

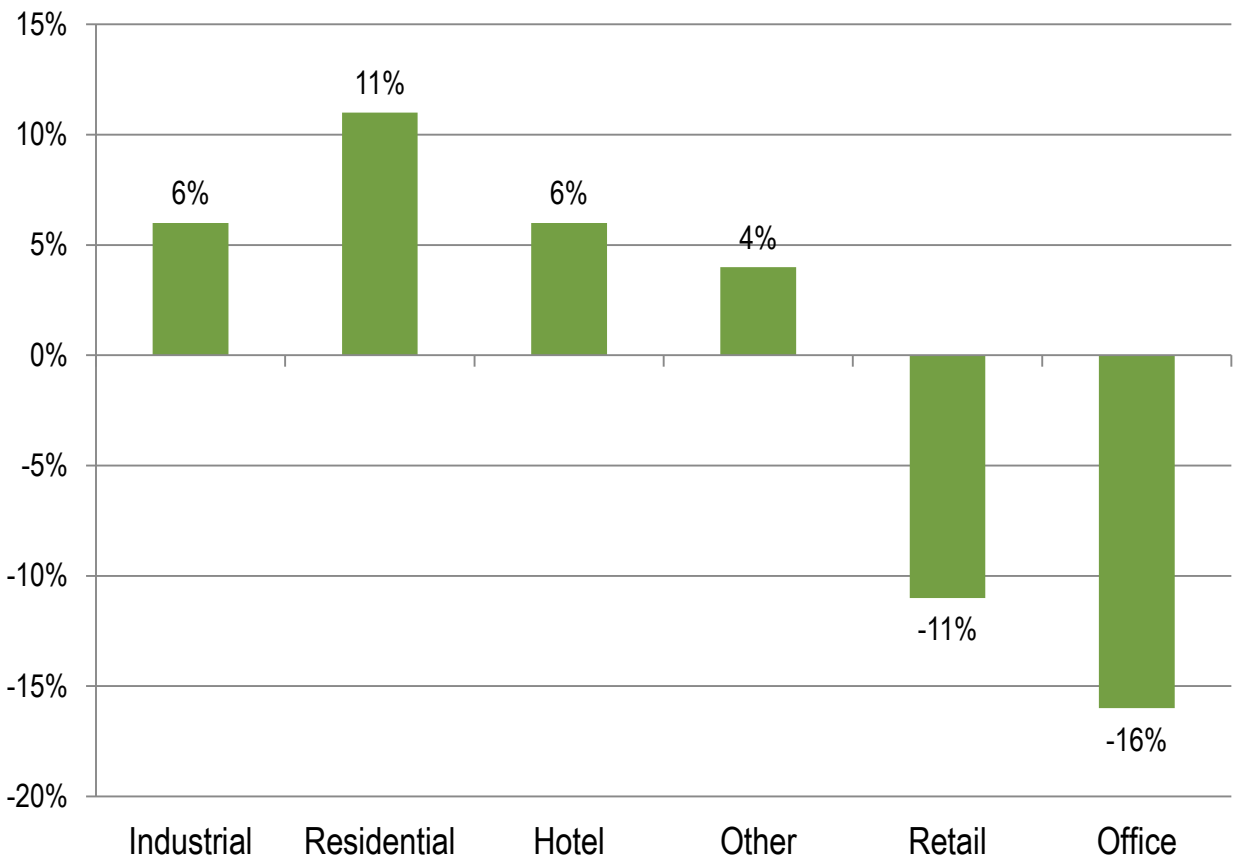
*Property type weights as of December 31, 2015*



**ERS Portfolio by Property Type**  
Based on ERS' NAV, US only

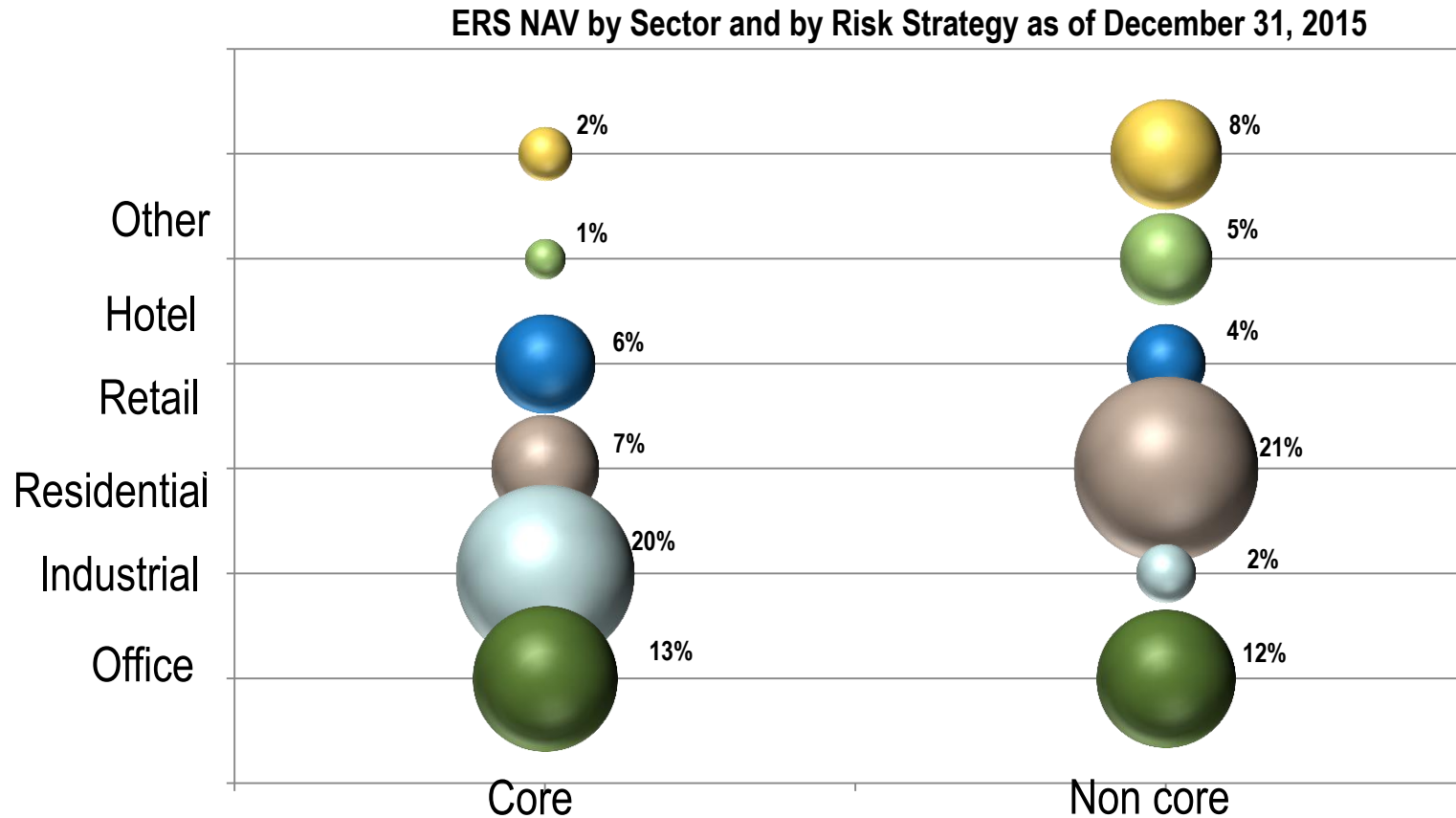


**ERS Portfolio Compared to NCREIF ODCE Benchmark, US Only**



# Real Estate Market Update & Program Overview

## ERS NAV by Investment Risk Strategy & Sector



Note: - "Other" property sector is generally comprised of student housing, self-storage facilities or land.  
- Office includes mixed-use.

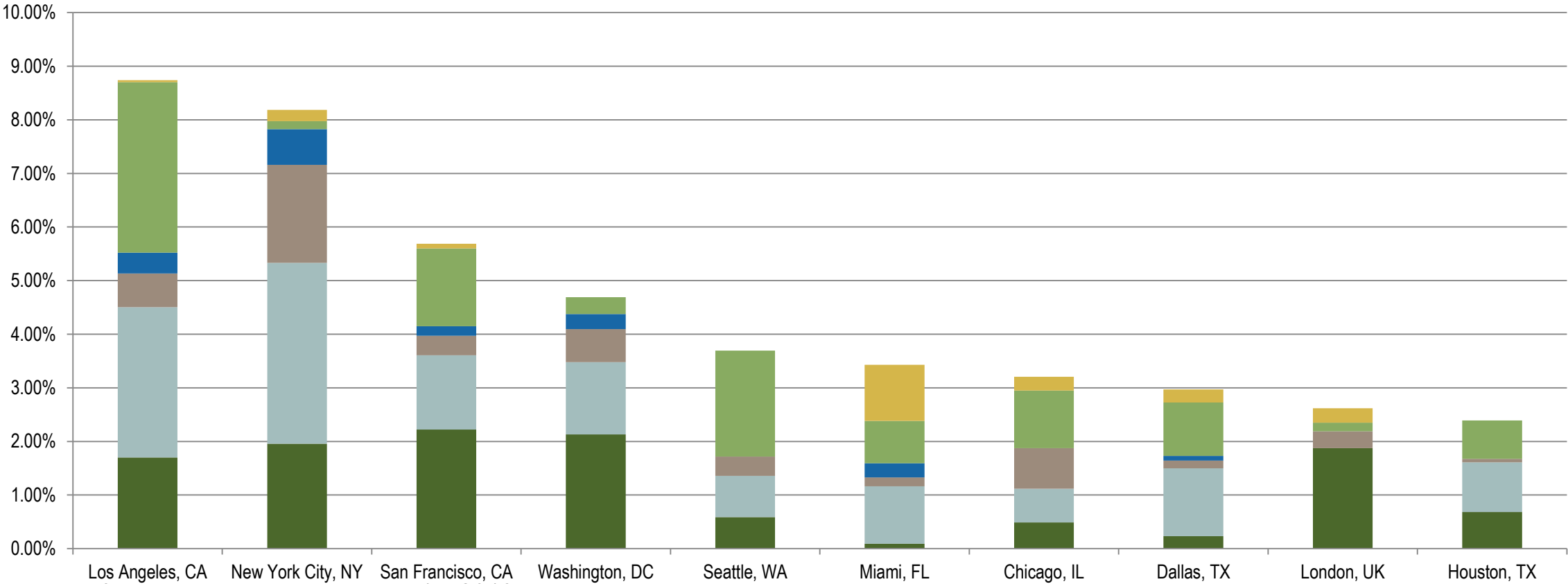
# Real Estate Market Update & Program Overview

## Geography as of December 31, 2015



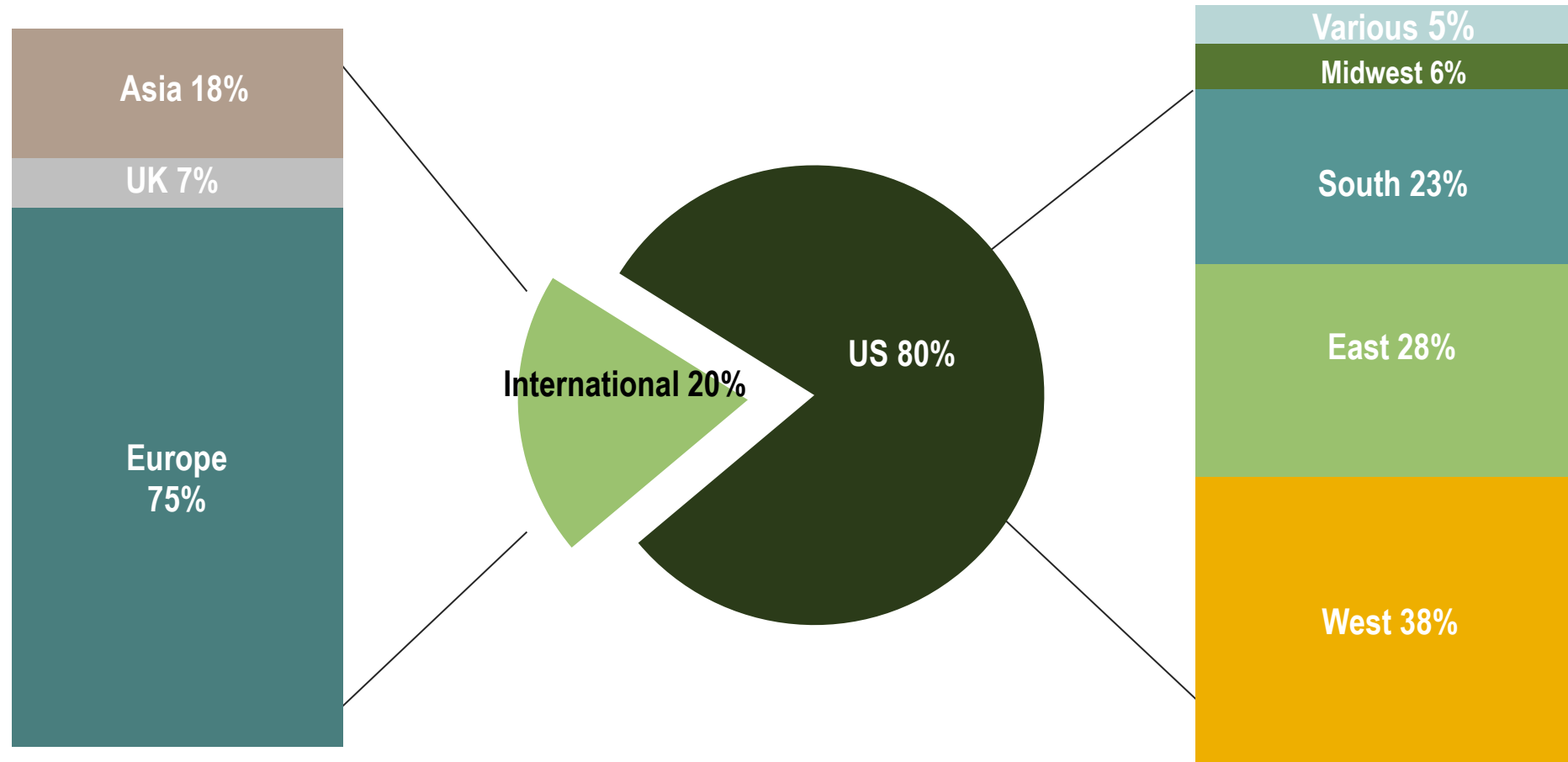
ERS Property Portfolio by Top 10 Metropolitan Statistical Areas (MSAs) and Sector  
Based on ERS' NAV exposure as of December 31, 2015

Office Residential Retail Hotel Industrial Other



# Real Estate Market Update & Program Overview

## *Geography as of December 31, 2015*



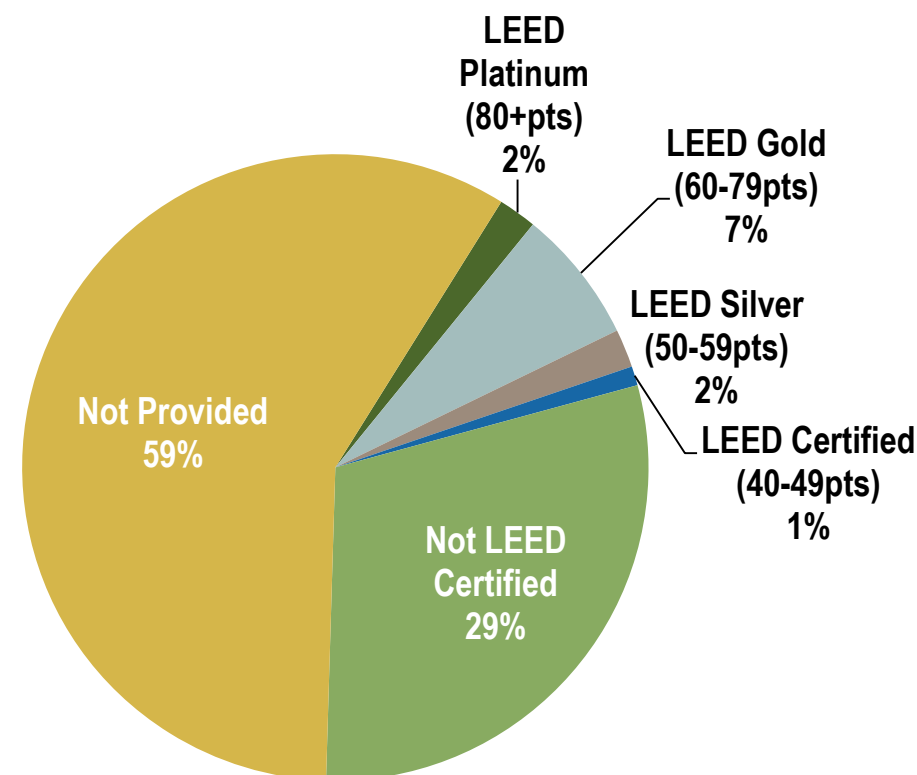
# ERS Private Real Estate “Amenity” Metric Tracking



Leadership in Energy and Environmental Design (LEED) is an indication of various sustainability features incorporated into a building which can improve its operating costs.

ERS Staff tracks LEED certification and Walkscore, which are both indicators of amenities that are becoming increasingly desirable by tenants and investors.

ERS Private Real Estate Select Portfolio\*: LEED Status

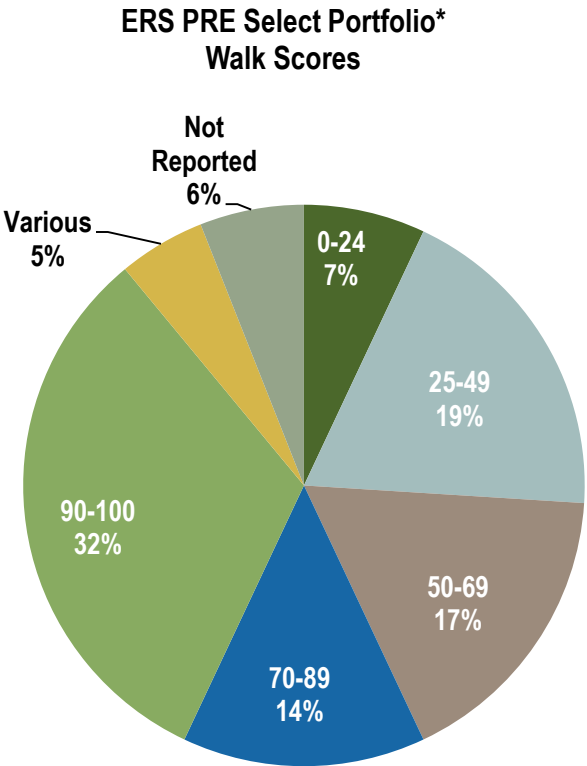


*\*The chart above is based on a select portfolio of ERS assets: US only and excluding industrial, self storage, manufactured housing and land. LEED is less relevant for these sectors. %'s are based on ERS' NAV as of Q4 '15.*



# ERS Private Real Estate “Amenity” Metric Tracking

## Walk Score



Walk Score®	Description
90 – 100	<b>Walker’s Paradise</b> – Daily errands do not require a car
70 – 89	<b>Very Walkable</b> – Most errands can be accomplished on foot
50 – 69	<b>Somewhat Walkable</b> – Some amenities within walking distance
25 – 49	<b>Car-Dependent</b> – A few amenities within walking distance
0 – 24	<b>Car-Dependent</b> – Almost all errands require a car

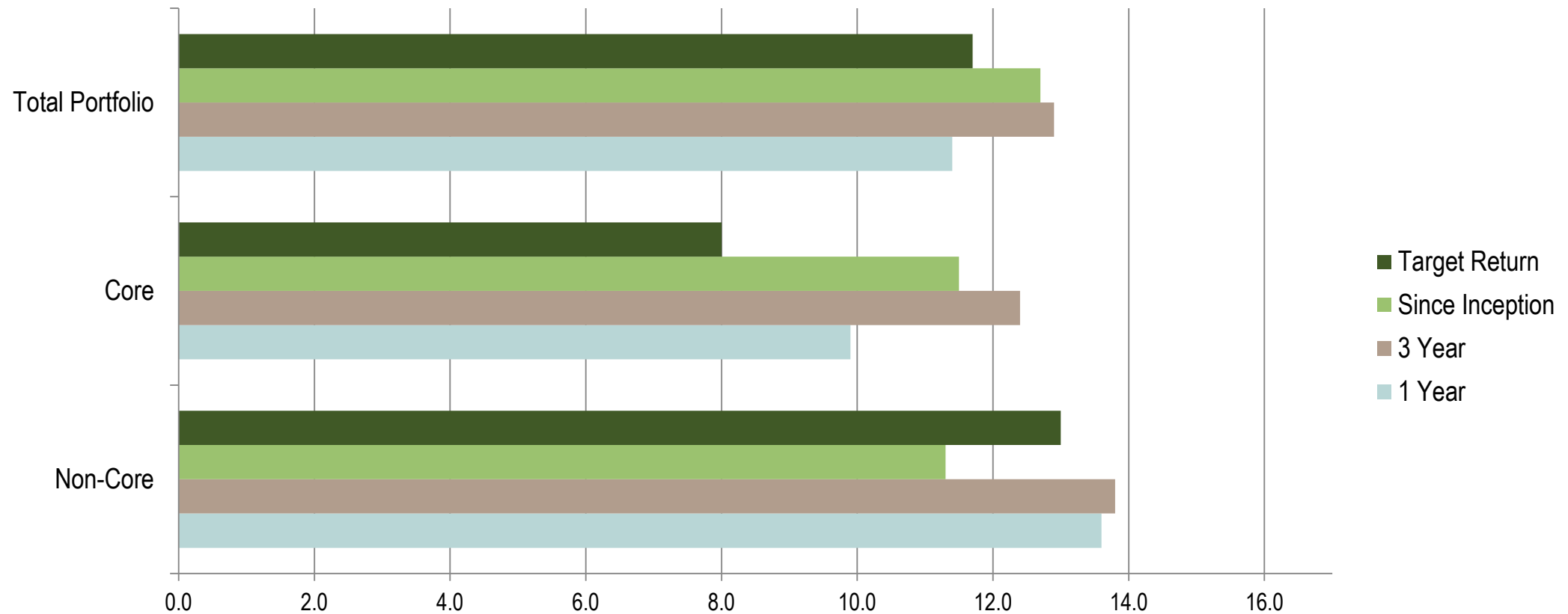


*\*The chart above is based on a select portfolio of ERS assets: US only and excluding industrial, self storage, manufactured housing and land. Walk Score is less relevant for these sectors. %’s are based on ERS’ NAV as of Q4 ’15.*

Source: Walk Score

# Real Estate Market Update & Program Overview

*Private Real Estate Return – Net IRR as of March 31, 2016*



# Real Estate Market Update & Program Overview

## *FY 2016 Accomplishments*



- Committed \$191 million to Private Real Estate through March 31 and closed on 8 new investments
- Negotiated an estimated \$45 million in savings for private real estate portfolio since inception plus non-economic terms to improve corporate governance
- Invested in two co-investments and closed on a co-investment separate account
- Increased tracking error for listed security portfolios
- Co-hosted the 3<sup>rd</sup> Bi-Annual REEM Conference for Emerging Managers

# Real Estate Market Update & Program Overview

## *FY 2017 Initiatives*



- Continue committing capital to Private Real Estate on a selective basis
- Focus on co-investments and longer term hold strategies
- Targeting \$0 million in commitments with a range of \$0 to \$250 million and 2 to 15 new commitments
- Incorporate option strategies into listed real estate portfolios

Questions?



# Employees Retirement System of Texas

Current Real Estate Market Conditions

May 17, 2016

Dan Krivinskas, Director of Real Estate Consulting  
Mark Bartmann, Consultant



# Current Real Estate Market Conditions

## *Real Estate Market Summary*

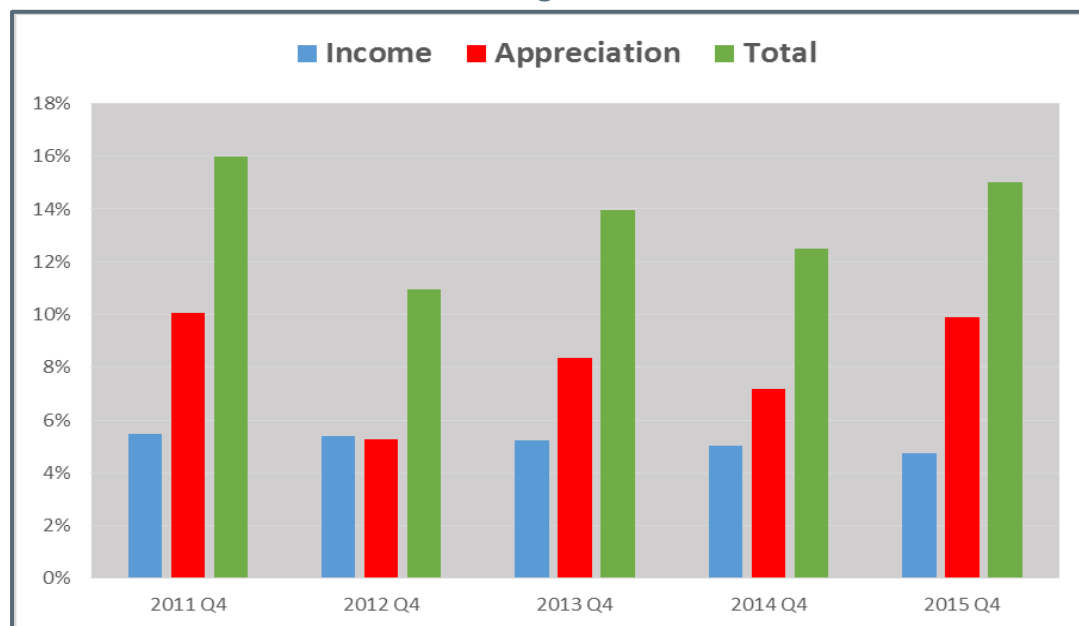
- United States: Relative Value in Non-Core Real Estate
  - Core Real Estate Returns Remain Strong, While Transaction Volume Continues to Increase
  - Except for Multifamily, New Supply Is Relatively Muted
  - Opportunities Exist in Secondary Markets as well as Hybrid and “Unloved” Property Types
  - Accretive Debt Is Abundant
- Europe: Transaction Volume Up, But Deleveraging Pace Is Slow
  - Europe Remains in a Slow Growth Environment
  - Transaction Levels Are High in Major Markets, Slower in Secondary Markets
  - Secondary Cities in the UK and Other Western European Markets Are Drawing More Institutional Interest
- Asia & Emerging Markets: Short-Term Pain, Long-Term Opportunity
  - Asian Real Estate Markets Experienced Some Disruption in 2015 as Chinese Economy Slowed, Presenting a Potential Opportunity
  - Weaker Economic Growth and Less Capital in Other Emerging Markets, Including Latin America, Presents a Long Term Opportunity, But Patience Is Necessary to Best Take Advantage

# Current Real Estate Market Conditions

*US: Strong Core Real Estate Returns Continue, While Volume and Pricing Continue to Surge*

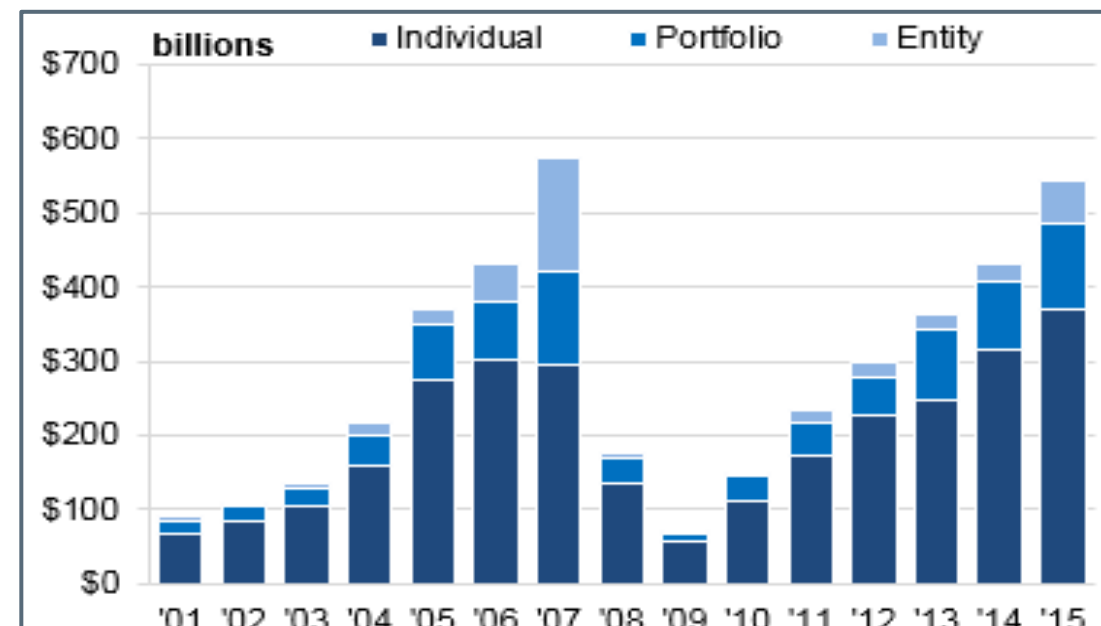
- Strong Income and Appreciation Returns in Core U.S. Real Estate Valuations
- Transaction Volume Has Surpassed 2006 Levels

NCREIF-ODCE Index Returns,  
Years Ending 2011-2015



Source: NCREIF, March 2016

U.S. Real Estate Transaction Volume,  
2001-2015



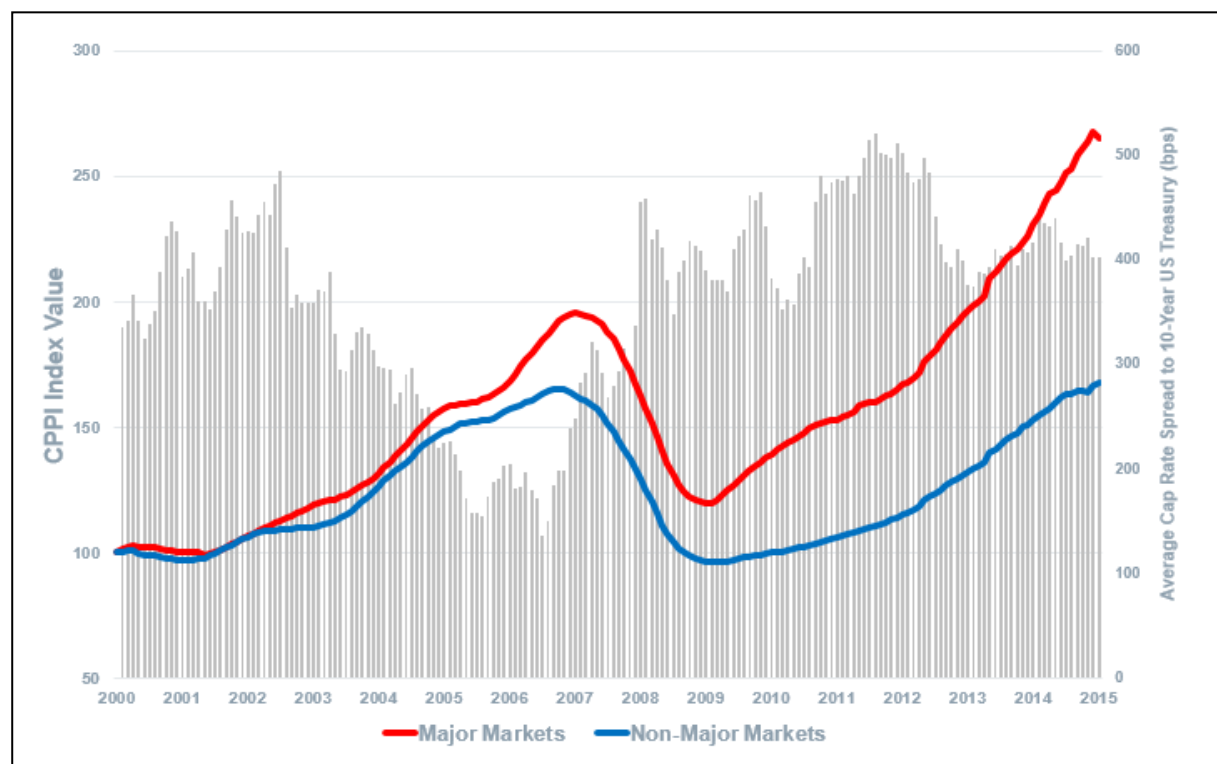
Source: Real Capital Analytics, March 2016



# Current Real Estate Market Conditions

*Continued Opportunity to Capitalize on Mispricing in Secondary Markets*

- Valuation Spreads Between Secondary / Non-Major Markets Relative to Primary / Major Markets Are Near All-Time Highs
- Risk-Reward Dynamic Is Increasingly Favoring Markets That Are Not Priced as “Bond Alternatives”



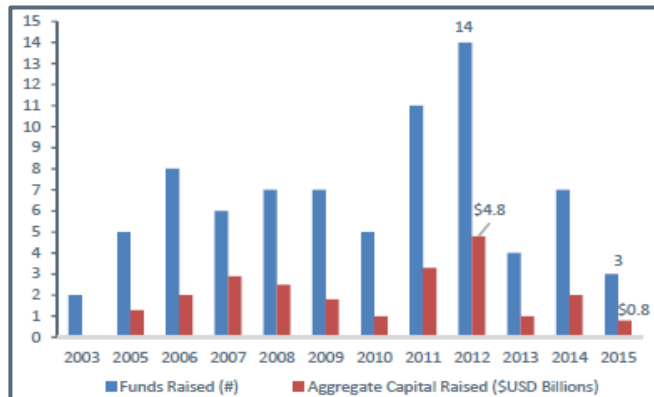
Source: Real Capital Analytics, March 2016

# Current Real Estate Market Conditions

## Strategic Opportunities in Global Real Estate

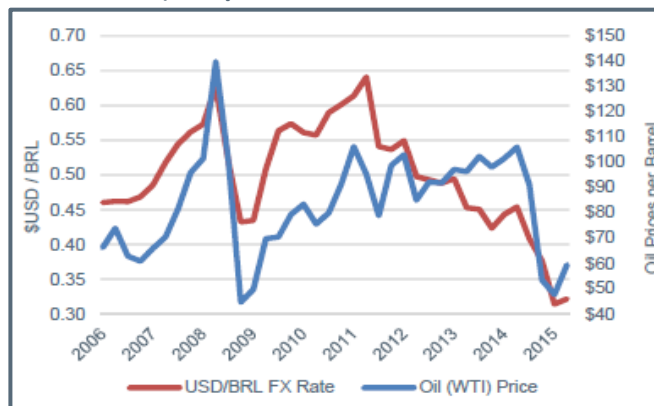
- Latin America Represent an Investment Opportunities Over the Long-Term, Despite Short-Term Volatility

Latin American Real Estate Fund Raising



Source: Preqin, 2016

\$USD/BRL FX and Price of Oil

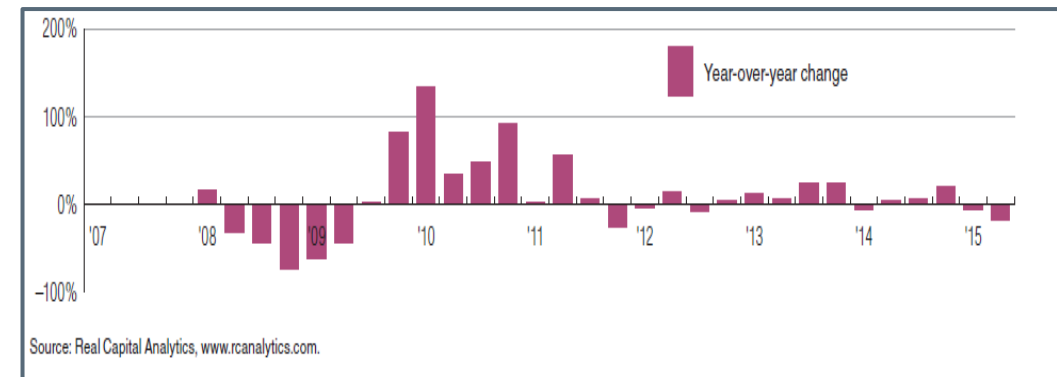


Source: Federal Reserve Bank of St. Louis, 2016

- Concern Over Slow Growth in China Impacted the Broader Asia Economy and Slowed Transaction Volume in 2015

- Over the Long Term, Asian Economic Growth Expected to be Driven by Modernization, Global Product Migration, and Emergence of Middle Class

Asia Pacific Transaction Volume



Source: Real Capital Analytics, www.rcanalytics.com.

Source: Real Capital Analytics, 2016

Questions?